=> d his

(FILE 'HOME' ENTERED AT 09:23:43 ON 20 SEP 2002) FILE 'REGISTRY' ENTERED AT 09:23:47 ON 20 SEP 2002 STRUCTURE UPLOADED L1L211 S L1 5117 S L1 FUL L3 STRUCTURE UPLOADED L421 S L4 L5 STRUCTURE UPLOADED L6 L7 STRUCTURE UPLOADED L8 8 S L7 L9 36 S L7 CSS FUL FILE 'CAPLUS' ENTERED AT 09:35:41 ON 20 SEP 2002 233 S L9 L10 FILE 'REGISTRY' ENTERED AT 09:36:21 ON 20 SEP 2002 SCREEN 963 AND 1700 L11 STRUCTURE UPLOADED L12 L13 OUE L12 AND L11 L14 10 SEARCH L13 CSS SUB=L9 FULL FILE 'CAPLUS' ENTERED AT 09:40:42 ON 20 SEP 2002 L15 5 S L14 FILE 'REGISTRY' ENTERED AT 09:48:18 ON 20 SEP 2002 L16 SCREEN 963 AND 1700 STRUCTURE UPLOADED L17 L18 OUE L17 AND L16 55 S L18 CSS FUL L19 SCREEN 963 AND 1700 L20 L21 SCREEN 2127 L22 STRUCTURE UPLOADED L23 QUE L22 AND L20 NOT L21 20 SEARCH L23 CSS SUB=L19 FULL L24 FILE 'CAPLUS' ENTERED AT 09:52:11 ON 20 SEP 2002 L25 2 S L24 => d 122 L22 HAS NO ANSWERS L22 STR

$$G_{1}$$
 G_{2}
 G_{2}
 G_{3}
 G_{4}
 G_{1}
 G_{1}

G1 H, Me, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu
G2 H, Me, Et, n-Pr, i-Pr, MeO, EtO, n-PrO, i-PrO, OH

Structure attributes must be viewed using STN Express query preparation.

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=> d bib abs hitstr 1-2
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L25
    ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
AN
     2002:449632 CAPLUS
DN
     137:20209
TI
     Preparation of hydroxylated sibutramine analogs as neuronal monoamine
     uptake inhibitors
IN
     Senanayake, Chrisantha H.; Rubin, Paul D.; Jerussi, Thomas P.
     Sepracor Inc., USA
PA
SO
     PCT Int. Appl., 115 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
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ΡI
     WO 2002046138
                      A2
                            20020613
                                           WO 2001-US47433 20011204
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
             UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    US 2002115727
                                           US 2001-998195
                       A1
                            20020822
                                                           20011203
PRAI US 2000-250524P
                       ₽
                            20001204
    US 2000-257052P
                            20001222
                       Ρ
    MARPAT 137:20209
OS
GΙ
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$$_{\mathrm{C1}}$$
 OH $_{\mathrm{NH_2}}$ Me

AB Title compds. 4-ClC6H4CR2CH(NR1R2)CHR4CHMeCH2R3 (I; R2 = CH2CHR5CH2; R1,R2 = H or alkyl; .gtoreq.1 of R3-R5 = OH or alkoxy and the others = H, oh alkoxy) were prepd. Thus, 1-(4-chlorophenyl)cyclobutanecarboxaldehyde was condensed with (R)-Me2CSONH2 and the product subjected to asym. addn. by chiral O-protected LiCH2CHMeCH2OH to give, e.g., title compd. II. Data for biol. activity of I were given.

IT 435343-58-1P 435343-60-5P 435343-63-8P 435343-65-0P 435343-67-2P 435343-69-4P 435343-71-8P 435343-73-0P 435343-83-2P 435343-95-6P 435343-97-8P

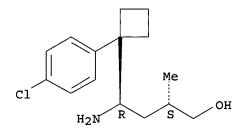
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of hydroxylated sibutramine analogs as neuronal monoamine uptake inhibitors)

RN 435343-58-1 CAPLUS

CN Cyclobutanebutanol, .delta.-amino-1-(4-chlorophenyl)-.beta.-methyl-, (.beta.S,.delta.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 435343-60-5 CAPLUS Cyclobutanebutanol, .delta.-amino-1-(4-chlorophenyl)-.beta.-methyl-, (.beta.R,.delta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 435343-63-8 CAPLUS CN Cyclobutanebutanol, .delta.-amino-1-(4-chlorophenyl)-.beta.-methyl-,

(.beta.S,.delta.S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

Absolute stereochemistry.

Absolute stereochemistry.

RN 435343-71-8 CAPLUS

CN Cyclobutanebutanol, 1-(4-chlorophenyl)-.beta.-methyl-.delta.-(methylamino)-, (.beta.S,.delta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 435343-73-0 CAPLUS

Absolute stereochemistry.

RN 435343-83-2 CAPLUS

CN Cyclobutanol, 3-(4-chlorophenyl)-3-[(1R)-3-methyl-1-(methylamino)butyl]-, trans- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 435343-95-6 CAPLUS

CN Cyclobutaneethanol, .beta.-amino-1-(4-chlorophenyl)-.alpha.-(1-methylethyl)-, (.alpha.R,.beta.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 435343-97-8 CAPLUS

CN Cyclobutaneethanol, .beta.-amino-1-(4-chlorophenyl)-.alpha.-(1-methylethyl)-, (.alpha.S,.beta.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L25 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 1996:713861 CAPLUS

DN 126:143907

TI Synthesis of sibutramine, a novel cyclobutylalkylamine useful in the treatment of obesity, and its major human metabolites

AU Jeffery, James E.; Kerrigan, Frank; Miller, Thomas K.; Smith, Graham J.; Tometzki, Gerald B.

CS Knoll Pharmaceuticals, Res. Development Dep., Nottingham, NG1 1GF, UK

SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (21), 2583-2589
CODEN: JCPRB4; ISSN: 0300-922X

PB Royal Society of Chemistry

DT Journal

LA English

OS CASREACT 126:143907

GI

AB Synthetic routes to N-{1-[1-(4-chlorophenyl)cyclobutyl]-3-methylbutyl}-N,N-dimethylamine (sibutramine) 1 (= I) and its demethylated and hydroxylated human metabolites N-{1-[1-(4-chlorophenyl)cyclobutyl]-3-methylbutyl}-N-methylamine 2, 1-[1-(4-chlorophenyl)cyclobutyl]-3-methylbutylamine 3, 4-amino-4-[1-(4-chlorophenyl)cyclobutyl]-2-methylbutan-1-ol 4 and c-3-(1-amino-3-methylbutyl)-3-(4-chlorophenyl)cyclobutan-r-1-ol 5a are described. Key steps are tandem Grignard-redn. reactions on 1-(4-chlorophenyl)cyclobutanecarbonitrile 7 and its 3-(tetrahydropyran-2-yloxy)-substituted analog 14 and a convenient one-pot conversion of 4-chlorophenylacetonitrile 6 into the 1-(4-chlorophenyl)-3-hydroxycyclobutanecarbonitrile 13.

IT 186521-83-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of sibutramine and its major human metabolites with tandem Grignard-redn. reactions of 1-(4-chlorophenyl)cyclobutanecarbonitrile and cycloalkylation of 4-chlorophenylacetonitrile as key steps)

RN 186521-83-5 CAPLUS

CN Cyclobutanebutanol, .delta.-amino-1-(4-chlorophenyl)-.beta.-methyl- (9CI) (CA INDEX NAME)

IT 186521-84-6P 186521-90-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of sibutramine and its major human metabolites with tandem Grignard-redn. reactions of 1-(4-chlorophenyl)cyclobutanecarbonitrile and cycloalkylation of 4-chlorophenylacetonitrile as key steps)

RN 186521-84-6 CAPLUS

CN Cyclobutanol, 3-(1-amino-3-methylbutyl)-3-(4-chlorophenyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 186521-90-4 CAPLUS CN Cyclobutanol, 3-(1-amino-3-methylbutyl)-3-(4-chlorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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